

PRELIMINARY DETERMINATION ON PERMIT APPLICATION

Date of Mailing: April 9, 2018

Name of Applicant: Dickman Excavating S & G

Source: Portable Crushing and Screening Operations

<u>Proposed Action</u>: The Department of Environmental Quality (Department) proposes to issue a permit, with conditions, to the above-named applicant. The application was assigned Montana Air Quality Permit Application Number 2961-01.

Proposed Conditions: See attached.

<u>Public Comment</u>: Any member of the public desiring to comment must submit such comments in writing to the Air Quality Bureau (Bureau) of the Department at the above address. Comments may address the Department's analysis and determination, or the information submitted in the application. In order to be considered, comments on this Preliminary Determination are due by April 24, 2018. Copies of the application and the Department's analysis may be inspected at the Bureau's office in Helena. For more information, you may contact the Department.

<u>Departmental Action</u>: The Department intends to make a decision on the application after expiration of the Public Comment period described above. A copy of the decision may be obtained at the above address. The permit shall become final on the date stated in the Department's Decision on this permit, unless an appeal is filed with the Board of Environmental Review (Board).

<u>Procedures for Appeal</u>: Any person jointly or severally adversely affected by the final action may request a hearing before the Board. Any appeal must be filed by the date stated in the Department's Decision on this permit. The request for a hearing shall contain an affidavit setting forth the grounds for the request. Any hearing will be held under the provisions of the Montana Administrative Procedures Act. Submit requests for a hearing in triplicate to: Chairman, Board of Environmental Review, P.O. Box 200901, Helena, MT 59620.

For the Department,

Julie A. Merkel

Permitting Services Section Supervisor

Julio A Merkel

Air Quality Bureau (406) 444-3626

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JM:SJ Enclosure

MONTANA AIR QUALITY PERMIT

Issued To: Dickman Excavating S & G
130 Gibson Flats Road

Excavating S & G MAQP: #2961-01 on Flats Road Application Complete: 3/28/2018

Great Falls, MT 59405 Preliminary Determination Issued: 4/9/2018

Department's Decision Issued:

Permit Final:

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to Dickman Excavating S & G (Dickman Excavating) pursuant to Sections 75-2-204 and 211 of the Montana Code Annotated (MCA), as amended, and Administrative Rules of Montana (ARM) 17.8.740, *et seq.*, as amended, for the following:

SECTION I: Permitted Facilities

A. Plant Location

Dickman Excavating operates a portable crushing and screening operation, which was initially located in the NW¹/₄ of the SW¹/₄ of Section 34, Township 20 North, Range 4 East, Cascade County, Montana. However, MAQP #2961-01 applies while operating at any location in Montana, except those areas having a Department of Environmental Quality (Department)-approved permitting program, areas considered tribal lands, or areas in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) nonattainment areas. A Missoula County air quality permit will be required for locations within Missoula County, Montana. An addendum will be required for locations in or within 10 km of certain PM₁₀ nonattainment areas.

B. Current Permit Action

On February 8, 2018, the Montana Department of Environmental Quality – Air Quality Bureau (Department) received an application from Dickman Excavating to update the equipment list associated with this permit. Additional information was received as necessary to complete the application on March 28, 2018, including application fee, affidavit of publication of public notice, and confirmed desired business name.

SECTION II: Conditions and Limitations

A. Emission Limitations

- 1. All visible emissions from any Standards of Performance for New Stationary Source (NSPS) affected crusher shall not exhibit an opacity in excess of the following averaged over 6 consecutive minutes (ARM 17.8.340 and 40 CFR 60, Subpart OOO):
 - For crushers that commence construction, modification, or reconstruction on or after April 22, 2008: 12% opacity

- For crushers that commence construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008: 15% opacity.
- 2. All visible emissions from any other NSPS-affected equipment (such as screens and conveyors) shall not exhibit an opacity in excess of the following averaged over six consecutive minutes (ARM 17.8.340 and 40 CFR 60, Subpart OOO):
 - For equipment that commence construction, modification, or reconstruction on or after April 22, 2008: 7% opacity
 - For equipment that commence construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008: 10% opacity
- 3. All visible emissions from any non-NSPS affected equipment shall not exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304).
- 4. Water and spray bars shall be available on-site at all times and operated as necessary to maintain compliance with the opacity limitations in Sections II.A.1, II.A.2, and II.A.3 (ARM 17.8.749).
- 5. Dickman Excavating shall not cause or authorize the use of any street, road or parking lot without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308).
- 6. Dickman Excavating shall treat all unpaved portions of the haul roads, access roads, parking lots, or the general plant area with water and/or chemical dust suppressant, as necessary, to maintain compliance with the reasonable precautions limitation in Section II.A.5 (ARM 17.8.749).
- 7. Crushing throughput is limited to 3,942,000 tons during any rolling 12-month time period (ARM 17.8.749).
- 8. Screening throughput is limited to 3,942,000 tons during any rolling 12-month time period (ARM 17.8.749).
- 9. The maximum combined rated capacity of diesel engine(s) driving generator(s) shall not exceed 143 horsepower (hp). This does not include engines that power self-propelled equipment (ARM 17.8.749).
- 10. If the permitted equipment is used in conjunction with any other equipment owned or operated by Dickman Excavating, at the same site, production shall be limited to correspond with an emission level that does not exceed 250 tons during any rolling 12-month period. Any calculations used to establish production levels shall be approved by the Department (ARM 17.8.749).

- 11. Dickman Excavating shall comply with all applicable standards and limitations, monitoring, reporting, recordkeeping, testing, and notification requirements contained in 40 CFR 60, Subpart OOO, *Standards of Performance for Nonmetallic Mineral Processing Plants* (ARM 17.8.340 and 40 CFR 60, Subpart OOO).
- 12. Dickman Excavating shall comply with all applicable standards and limitations, and the reporting, recordkeeping, and notification requirements contained in 40 CFR 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines and 40 CFR 63, Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, for any applicable diesel engine (ARM 17.8.340; 40 CFR 60, Subpart IIII; ARM 17.8.342 and 40 CFR 63, Subpart ZZZZ).

B. Testing Requirements

- 1. Within 60 days after achieving maximum production, but no later than 180 days after initial start-up, an Environmental Protection Agency (EPA) Method 9 opacity test and/or other methods and procedures as specified in 40 CFR 60.675 must be performed on all NSPS-affected equipment to demonstrate compliance with the emission limitations contained in Section II.A.1 and II.A.2. Additional testing may be required by 40 CFR 60, Subpart OOO (ARM 17.8.340 and 40 CFR 60, Subpart OOO).
- 2. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
- 3. The Department may require further testing (ARM 17.8.105).

C. Operational Reporting Requirements

- 1. If this crushing/screening plant is moved to another location, an Intent to Transfer form must be sent to the Department and a Public Notice Form for Change of Location must be published in a newspaper of general circulation in the area to which the transfer is to be made, at least 15 days prior to the move. The proof of publication (affidavit) of the Public Notice Form for Change of Location must be submitted to the Department prior to the move. These forms are available from the Department (ARM 17.8.749 and ARM 17.8.765).
- 2. Dickman Excavating shall supply the Department with annual production information for all emission points, as required by the Department in the annual emission inventory request. The request will include, but not be limited to, all sources of emissions identified in the emission inventory contained in the permit analysis.

Production information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request. Information shall be in the units required by the Department. This information may be used for calculating operating fees, and/or to verify compliance with permit limitations (ARM 17.8.505).

- 3. Dickman Excavating shall notify the Department of any construction or improvement project conducted, pursuant to ARM 17.8.745, that would include *the addition of a new emissions unit*, change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or would result in an increase in source capacity above its permitted operation. The notice must be submitted to the Department, in writing, 10 days prior to startup or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(l)(d) (ARM 17.8.745).
- 4. Dickman Excavating shall maintain records showing daily hours of operation and daily production rates for the last 12 months. The records compiled in accordance with this permit shall be maintained by Dickman Excavating as a permanent business record for at least 5 years following the date of the measurement, must be available at the plant site for inspection by the Department, and must be submitted to the Department upon request. These records may be stored at a location other than the plant site upon approval by the Department (ARM 17.8.749).
- 5. Dickman Excavating shall document, by month, the crushing throughput of the facility. By the 25th day of each month, Dickman Excavating shall total the crushing throughput from the facility for the previous month. The monthly information will be used to demonstrate compliance with the rolling 12-month limitation in Section II.A.7. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).
- 6. Dickman Excavating shall document, by month, the screening throughput of the facility. By the 25th day of each month, Dickman Excavating shall total the screening throughput from the facility for the previous month. The monthly information will be used to demonstrate compliance with the rolling 12-month limitation in Section II.A.8. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).
- 7. Dickman Excavating shall notify the Department in writing of any changes in crushing, screening, conveying, or generator engine equipment to be associated with this facility (ARM 17.8.749).

SECTION III: General Conditions

- A. Inspection Dickman Excavating shall allow the Department's representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment such as Continuous Emission Monitoring Systems (CEMS) or Continuous Emissions Rate Monitoring System (CERMS), or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.
- B. Waiver The permit and all the terms, conditions, and matters stated herein shall be deemed accepted if Dickman Excavating fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations Nothing in this permit shall be construed as relieving Dickman Excavating of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided for in ARM 17.8.740, *et seq.* (ARM 17.8.756)
- D. Enforcement Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties or other enforcement action as specified in Section 75-2-401, *et seq.*, MCA.
- E. Appeals Any person or persons jointly or severally adversely affected by the Department's decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefor, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing does not stay the Department's decision, unless the Board issues a stay upon receipt of a petition and a finding that a stay is appropriate under Section 75-2-211(11)(b), MCA. The issuance of a stay on a permit by the Board postpones the effective date of the Department's decision until conclusion of the hearing and issuance of a final decision by the Board. If a stay is not issued by the Board, the Department's decision on the application is final 16 days after the Department's decision is made.
- F. Permit Inspection As required by ARM 17.8.755, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by the Department at the location of the permitted source.
- G. Air Quality Operation Fees Pursuant to Section 75-2-220, MCA, failure to pay the annual operation fee by Dickman Excavating may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.
- H. Duration of Permit Construction or installation must begin or contractual obligations entered into that would constitute substantial loss within 3 years of permit issuance and proceed with due diligence until the project is complete or the permit shall expire (ARM 17.8.762).
- I. The Department may modify the conditions of this permit based on local conditions of any future site. These factors may include, but are not limited to, local terrain, meteorological conditions, proximity to residences, etc.

J. Dickman Excavating shall comply with the conditions contained in this permit while operating in any location in Montana, except within those areas that have a Department-approved permitting program or areas considered tribal lands.

Montana Air Quality Permit (MAQP) Analysis Dickman Excavating S & G MAQP #2961-01

I. Introduction/Process Description

Dickman Excavating S & G (Dickman Excavating) owns and operates a portable crushing and screening operation.

A. Permitted Equipment

MAQP #2961-01 is intended to provide a flexible permitting approach, whereas the number and maximum rated capacity of crushers and screens are not defined, rather, total combined allowable throughput limited. Likewise, generator engine maximum allowable capacity is defined, but engine make, model, and actual rated capacity is not defined. The intent is that Dickman Excavating S & G may add or replace crushing and screening equipment provided maximum throughput limitations are adhered to and notifications are provided.

- Crushing equipment limited to 3,942,000 tons per rolling 12 months of combined throughput (currently a Metso LT 96 mobile jaw crusher at approximately 350 tons per hour (TPH) and an asphalt recycling crusher at approximately 100 TPH)
- Screening equipment limited to 3,942,000 tons per rolling 12 months of combined throughput (currently one screen)
- Diesel Generator Engine(s) with combined maximum rated capacity not to exceed 142 horsepower (hp)
- Up to 4 Conveyors
- Fugitive emissions associated with loading, unloading, pile forming and erosion, and vehicle related emissions from haul roads and unpaved area travel

B. Source Description

Dickman Excavating's home pit is located in the NW¹/₄ of the SW¹/₄ of Section 34, Township 20 North, Range 4 East, Cascade County, Montana.

C. Permit History

A complete application was received by Dickman Excavating on July 24, 1996 for the operation of a 50 ton per hour jaw crusher, 50 ton per hour cone crusher, a screen, four conveyors and a feeder, and a 75-kilowatt generator. **MAQP #2961-00** was issued final on August 30, 1996.

D. Current Permit Action

On February 8, 2018, the Montana Department of Environmental Quality – Air Quality Bureau (Department) received an application from Dickman Excavating to update the equipment list associated with this permit. Additional information was received as necessary to complete the application on March 28, 2018.

E. Additional Information

Additional information, such as applicable rules and regulations, Best Available Control Technology (BACT)/Reasonably Available Control Technology (RACT) determinations, air quality impacts, and environmental assessments, is included in the analysis associated with each change to the permit.

II. Applicable Rules and Regulations

The following are partial explanations of some applicable rules and regulations that apply to the facility. The complete rules are stated in the Administrative Rules of Montana (ARM) and are available, upon request, from the Department of Environmental Quality (Department). Upon request, the Department will provide references for locations of complete copies of all applicable rules and regulations where appropriate.

- A. ARM 17.8, Subchapter 1 General Provisions, including, but not limited to:
 - 1. <u>ARM 17.8.101 Definitions</u>. This rule includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
 - 2. ARM 17.8.105 Testing Requirements. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.
 - 3. <u>ARM 17.8.106 Source Testing Protocol</u>. The requirements of this rule apply to any emission source testing conducted by the Department, any source, or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq.*, Montana Code Annotated (MCA).

Dickman Excavating shall comply with the requirements contained in the Montana Source Test Protocol and Procedures Manual, including, but not limited to, using the proper test methods and supplying the required reports. A copy of the Montana Source Test Protocol and Procedures Manual is available from the Department upon request.

4. <u>ARM 17.8.110 Malfunctions</u>. (2) The Department must be notified promptly by telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation or to continue for a period greater than 4 hours.

- 5. ARM 17.8.111 Circumvention. (1) No person shall cause or permit the installation or use of any device or any means that, without resulting in reduction of the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner as to create a public nuisance.
- B. ARM 17.8, Subchapter 2 Ambient Air Quality, including, but not limited to:
 - 1. ARM 17.8.204 Ambient Air Monitoring
 - 2. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
 - 3. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
 - 4. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
 - 5. ARM 17.8.213 Ambient Air Quality Standard for Ozone
 - 6. ARM 17.8.214 Ambient Air Quality Standard for Hydrogen Sulfide
 - 7. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
 - 8. ARM 17.8.221 Ambient Air Quality Standard for Visibility
 - 9. ARM 17.8.222 Ambient Air Quality Standard for Lead
 - 10. ARM 17.8.223 Ambient Air Quality Standard for PM₁₀

Dickman Excavating must maintain compliance with the applicable ambient air quality standards.

- C. ARM 17.8, Subchapter 3 Emission Standards, including, but not limited to:
 - 1. <u>ARM 17.8.304 Visible Air Contaminants</u>. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.
 - 2. ARM 17.8.308 Particulate Matter, Airborne. (1) This rule requires an opacity limitation of less than 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate matter. (2) Under this rule, Dickman Excavating shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.
 - 3. ARM 17.8.309 Particulate Matter, Fuel Burning Equipment. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this section
 - 4. <u>ARM 17.8.310 Particulate Matter, Industrial Processes</u>. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter in excess of the amount set forth in this section.
 - 5. <u>ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel</u>. This rule requires that no person shall burn liquid, solid, or gaseous fuel in excess of the amount set forth in this section.

- 6. <u>ARM 17.8.324 Hydrocarbon Emissions--Petroleum Products</u>. (3) No person shall load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank tuck or trailer is equipped with a vapor loss control device as described in (1) of this rule.
- 7. ARM 17.8.340 Standard of Performance for New Stationary Sources and Emission Guidelines for Existing Sources. This rule incorporates, by reference, 40 CFR Part 60, Standards of Performance for New Stationary Sources (NSPS). Dickman Excavating is considered an NSPS affected facility under 40 CFR Part 60 and is subject to the requirements of the following subparts.
 - a. <u>40 CFR 60</u>, <u>Subpart A General Provisions</u> apply to all equipment or facilities subject to an NSPS Subpart as listed below:
 - b. 40 CFR 60, Subpart OOO Standards of Performance for Nonmetallic Mineral Processing Plants. In order for a crushing plant to be subject to this subpart, the facility must meet the definition of an affected facility and, the affected equipment must have been constructed, reconstructed, or modified after August 31, 1983. Based on the information submitted by Dickman Excavating, the portable crushing and screening equipment to be used under MAQP #2961-01 is subject to this subpart.
 - c. 40 CFR 60, Subpart IIII Standards of Performance for Stationary
 Compression Ignition Internal Combustion Engines (CI ICE). Owners
 and operators of stationary CI ICE that commence construction after
 July 11, 2005, where the stationary CI ICE are manufactured after April
 1, 2006, and are not fire pump engines, and owners and operators of
 stationary CI ICE that modify or reconstruct their stationary CI ICE
 after July 11, 2005, are subject to this subpart. Based on the information
 submitted by Dickman Excavating, the CI ICE equipment to be used
 under MAQP #2961-01 may be subject to this subpart if any engine is
 found to meet the definition of a stationary engine.
- 8. ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source Categories. This rule incorporates, by reference, 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Source Categories. Dickman Excavating is potentially considered a NESHAP-affected facility under 40 CFR Part 63 as follows:
 - a. <u>40 CFR 63, Subpart A General Provisions apply</u> to all equipment or facilities subject to a NESHAPs Subpart as listed below.
 - b. 40 CFR 63, Subpart ZZZZ National Emissions Standards for Hazardous Air Pollutants (HAPs) for Stationary Reciprocating Internal Combustion Engines (RICE). An owner or operator of a stationary reciprocating internal combustion engine (RICE) at a major or area source of HAP emissions is subject to this rule except if the stationary RICE is being tested at a stationary RICE test cell/stand. An area source of HAP emissions is a source

that is not a major source. Based on the information submitted by Dickman Excavating, the RICE equipment to be used under MAQP #2961-01 may be subject to this subpart if any engine is found to meet the definition of a stationary engine.

- D. ARM 17.8, Subchapter 5 Air Quality Permit Application, Operation, and Open Burning Fees, including, but not limited to:
 - 1. ARM 17.8.504 Air Quality Permit Application Fees. This rule requires that an applicant submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to the Department. Dickman Excavating submitted the appropriate permit application fee for the current permit action.
 - 2. <u>ARM 17.8.505 Air Quality Operation Fees</u>. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit, excluding an open burning permit, issued by the Department.

An air quality operation fee is separate and distinct from an air quality permit application fee. The annual assessment and collection of the air quality operation fee, described above, shall take place on a calendar-year basis. The Department may insert into any final permit issued after the effective date of these rules, such conditions as may be necessary to require the payment of an air quality operation fee on a calendar-year basis, including provisions that pro-rate the required fee amount.

- E. ARM 17.8, Subchapter 7 Permit, Construction, and Operation of Air Contaminant Sources, including, but not limited to:
 - 1. <u>ARM 17.8.740 Definitions</u>. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
 - 2. ARM 17.8.743 Montana Air Quality Permits--When Required. This rule requires a person to obtain an air quality permit or permit modification to construct, modify, or use any asphalt plant, crusher or screen that has the potential to emit (PTE) greater than 15 tons per year of any pollutant. Dickman Excavating has a PTE greater than 15 tons per year of particulate matter; therefore, an air quality permit is required.
 - 3. <u>ARM 17.8.744 Montana Air Quality Permits--General Exclusions</u>. This rule identifies the activities that are not subject to the Montana Air Quality Permit program.
 - 4. ARM 17.8.745 Montana Air Quality Permits--Exclusion for De Minimis Changes. This rule identifies the de minimis changes at permitted facilities that do not require a permit under the Montana Air Quality Permit Program.

- 5. ARM 17.8.748 New or Modified Emitting Units--Permit Application Requirements. (1) This rule requires that a permit application be submitted prior to installation, modification, or use of a source. Dickman Excavating submitted the required permit application for the current permit action. (7) This rule requires that the applicant notify the public by means of legal publication in a newspaper of general circulation in the area affected by the application for a permit. Dickman Excavating submitted an affidavit of publication of public notice for the March 17, 2018 issue of the *Great Falls Tribune*, a newspaper of general circulation in the Town of Great Falls in Cascade County, as proof of compliance with the public notice requirements.
- 6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.
- 7. <u>ARM 17.8.752 Emission Control Requirements</u>. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. The required BACT analysis is included in Section III of this permit analysis.
- 8. <u>ARM 17.8.755 Inspection of Permit</u>. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.
- 9. <u>ARM 17.8.756 Compliance with Other Requirements</u>. This rule states that nothing in the permit shall be construed as relieving Dickman Excavating of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.*
- 10. <u>ARM 17.8.759 Review of Permit Applications</u>. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.
- 11. ARM 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or modified source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.

- 12. <u>ARM 17.8.763 Revocation of Permit</u>. An air quality permit may be revoked upon written request of the permittee, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).
- 13. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.
- 14. ARM 17.8.765 Transfer of Permit. (1) This rule states that an MAQP may be transferred from one location to another if the Department receives a complete notice of intent to transfer location, the facility will operate in the new location for less than 1 year, the facility will comply with the FCAA and the Clean Air Act of Montana, and the facility complies with other applicable rules. (2) This rule states that an air quality permit may be transferred from one person to another if written notice of intent to transfer, including the names of the transferor and the transferee, is sent to the Department.
- F. ARM 17.8, Subchapter 8 Prevention of Significant Deterioration of Air Quality, including, but not limited to:
 - 1. <u>ARM 17.8.801 Definitions</u>. This rule is a list of applicable definitions used in this subchapter.
 - 2. ARM 17.8.818 Review of Major Stationary Sources and Major Modifications—Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow.

This facility is not a major stationary source because it is not a listed source and the facility's PTE is less than 250 tons per year of any pollutant.

- G. ARM 17.8, Subchapter 12 Operating Permit Program Applicability, including, but not limited to:
 - 1. <u>ARM 17.8.1201 Definitions</u>. (23) Major Source under Section 7412 of the FCAA is defined as any stationary source having:
 - a. PTE > 100 tons/year of any pollutant;

- b. PTE > 10 tons/year of any one hazardous air pollutant (HAP), PTE > 25 tons/year of a combination of all HAPs, or lesser quantity as the Department may establish by rule; or
- c. PTE > 70 tons/year of particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) in a serious PM₁₀ nonattainment area.
- 2. <u>ARM 17.8.1204 Air Quality Operating Permit Program Applicability</u>. (1) Title V of the FCAA Amendments of 1990 requires that all sources, as defined in ARM 17.8.1204 (1), obtain a Title V Operating Permit. In reviewing and issuing MAQP #2961-01 for Dickman Excavating, the following conclusions were made:
 - a. The facility's PTE is less than 100 tons/year for any pollutant.
 - b. The facility's PTE is less than 10 tons/year for any one HAP and less than 25 tons/year of all HAPs.
 - c. This source is not located in a serious PM₁₀ nonattainment area.
 - d. This facility is subject to current NSPS (40 CFR 60 Subpart OOO and potentially Subpart IIII).
 - e. This facility is potentially subject to current NESHAP (40 CFR 60 Subpart ZZZZ).
 - f. This source is not a Title IV affected source
 - g. This source is not a solid waste combustion unit.
 - h. This source is not an EPA designated Title V source.

Based on these facts, the Department has determined that Dickman Excavating will be a minor source of emissions as defined under Title V. However, if minor sources subject to NSPS are required to obtain a Title V Operating Permit, Dickman Excavating will be required to obtain a Title V Operating Permit.

III. BACT Determination

A BACT determination is required for each new or modified source. Dickman Excavating shall install on the new or modified source the maximum air pollution control capability which is technologically practicable and economically feasible, except that BACT shall be utilized.

Pursuant to ARM 17.8.752, the owner or operator of a new or modified facility or emitting unit for which a MAQP is required shall install on the new or modified facility or emitting unit the maximum air pollution control capability that is technically practicable and economically feasible. Pursuant to ARM 17.8.740(2), in no case may application of BACT result in emissions of any regulated air pollutant that would exceed the emissions allowable by any applicable standard under ARM Title 17, Chapter 8, Subchapter 3.

Crushing and Screening:

Particulate Matter emissions are created by crushing, screening, and conveying equipment. The potential uncontrolled emissions of particulate matter emissions from these operations are significant. The moisture content of the material processed can have a substantial effect on emissions. Surface wetness causes fine particles to agglomerate on or to adhere to the faces of larger stones, with a resulting dust suppression effect. However, as new fine particles are created by crushing and attrition and as the moisture content is reduced by evaporation, this suppressive effect diminishes. Plants that use wet suppression systems (spray nozzles) to maintain material moisture as needed throughout the process can effectively control Particulate Matter emissions throughout the process.

Pursuant to ARM 17.8.740(2), if the department determines that technological or economic limitations on the application of measurement methodology to a particular class of emitting units would make the imposition of an emission standard infeasible, it may instead prescribe a design, equipment, work practice, or operational standard or combination thereof, to require the application of BACT. Such standard must, to the degree possible, set forth the emission reduction achievable by implementation of such design, equipment, work practice, or operation and must provide for compliance by means that achieve equivalent results.

No measurement methodology exists to directly measure particulate emissions coming from crushing and screening operations which do not utilize a capture and control system. In accord with ARM 17.8.740(2), a visible emissions standard (opacity) may serve as a surrogate in defining the maximum degree of reduction required by BACT. Further, NSPS OOO requires that crushing and screening operations meet certain opacity standards, is applicable to this operation, and incorporated by reference in ARM 17.8 Subchapter 3. Therefore, these standards serve as the floor for determining the maximum degree of reduction achievable, while meeting BACT.

The Department has determined that the limitations of NSPS OOO meets BACT for this source. LHC shall install and utilize water spray bars throughout the process, using spraybar design and placement and water in amounts as necessary, to meet the opacity limitations of NSPS OOO.

Diesel Generator Engine(s):

Any new diesel-fired engine would likely be required to comply with federal engine emission limitations including, for example, EPA Tiered emission standards for non-road engines (40 CFR Part 89 or 1039), New Source Performance Standard emission limitations for stationary compression ignition engines (40 CFR 60, Subpart IIII), or National Emissions Standards for Hazardous Air Pollutant Sources for Reciprocating Internal Combustion Engines (40 CFR 63, Subpart ZZZZ). The Department has determined that compliance with any applicable federal emissions limits and standards, with no additional requirements, constitutes BACT for these engines.

IV. Emission Inventory**

	Potential to Emit in Tons Per Year							
Emissions Source	PM (fil)	PM ₁₀ (fil)	PM _{2.5} (fil)	PM (cond)	NOx	CO	VOC	SO_X
Crushing	5.91	2.37	0.14	0.00				

Screening	14.19	8.67	5.32	0.00				
Conveyor Transfer Points	1.10	0.36	0.08	0.00				
Piles	21.14	7.40	1.12	0.00				
Loading	0.60	0.20	0.04	0.00				
Unloading	0.03	0.03	0.00	0.00				
Haul Roads and Unpaved Areas	4.85	1.29	0.13	0.00				
Diesel Generator Engine	0.39	0.39	0.39	0.05	15.02	3.44	0.37	0.01
TOTAL	48.22	20.71	7.22	0.05	15.02	3.44	0.37	0.01

- O Total PM₁₀ emissions are 20.76 TPY, determined by the sum of PM₁₀(fil) + PM(cond)
- o Total PM_{2.5} emissions are 7.27 TPY, determined by the sum of PM_{2.5}(fil) + PM(cond)
- O Total Particulate Matter emissions are 48.27 TPY, determined by the sum of PM(fil) + PM(cond)

** CO = carbon monoxide

(fil) = filterable

HAPs = hazardous air pollutants

hp = horsepower

lb = pound

N/A = not applicable

ND = no data available

 NO_X = oxides of nitrogen

PM = particulate matter

 $PM_{10} = particulate \ matter \ with an aerodynamic diameter of <math display="inline">10 \ microns \ or \ less$

 $PM_{2.5}$ = particulate matter with an aerodynamic diameter of 2.5 microns or less

 SO_2 = sulfur dioxide

TPH = tons per hour

TPY = tons per year

VOC = volatile organic compounds

yr = year

<u>Crushing</u> <u>http://www.epa.gov/ttn/chief/ap42/ch11/final/c11s1902.pdf</u>

Maximum Throughput: 450 ton/hr (maximum rated throughput for any configuration)

Hours of Operation: 8760 hr/yr

PM Emissions

Emissions Factor: 0.003 lb/ton (assume controlled due to BACT / NSPS / 20% opacity)
Calculations: 0.003lb/ton*450ton/hr= 1.35 lb/hr

1.35lb/hr*8760hr/yr*0.0005 ton/lb = **5.91 ton/yr**

PM10 Emissions

Emissions Factor: 0.0012 lb/ton (assume controlled due to BACT / NSPS / 20% opacity)
Calculations 0.0012lb/ton*450ton/hr= 0.54 lb/hr

0.54lb/hr*8760hr/yr*0.0005 ton/lb = **2.37** ton/yr

PM2.5 Emissions

Emissions Factor: 0.00007 lb/ton (assume controlled due to BACT / NSPS / 20% opacity) Calcualtions: 0.00007lb/ton*450ton/hr= 0.0315 lb/hr 0.0315lb/hr*8760hr/yr*0.0005 ton/lb = 0.14 ton/yr

http://www.epa.gov/ttn/chief/ap42/ch11/final/c11s1902.pdf Screening

Maximum Throughput: 450 ton/hr (maximum rated throughput for any configuration)

Hours of Operation: 8760 hr/yr

PM Emissions

Emissions Factor: 0.0036 lb/ton (assume controlled due to BACT / NSPS / 20% opacity) Calculations:

0.0036lb/ton*450ton/hr= 1.62 lb/hr

1.62lb/hr*8760hr/yr*0.0005 ton/lb = 7.10 ton/yr

PM10 Emissions

Emissions Factor: 0.0022 lb/ton (assume controlled due to BACT / NSPS / 20% opacity) Calculations: 0.0022lb/ton*450ton/hr= 0.99 lb/hr

> 0.99lb/hr*8760hr/yr*0.0005 ton/lb = 4.34 ton/yr

PM2.5 Emissions

Emissions Factor: (See table - AP-42 indicates logarithmic charts are linear) 0.001349774 lb/ton Calculations: 0.00134977443912449lb/ton*450ton/hr= 0.6073985 lb/hr

> 0.607398497606022lb/hr*8760hr/yr*0.0005 ton/lb =2.66 ton/yr

http://www.epa.gov/ttn/chief/ap42/ch11/final/c11s1902.pdf **Conveyor Transfers**

450 ton/hr Maximum Throughput: Hours of Operation: 8760 hr/yr

Number of Conveyor Transfers: 4 conveyor transfers

PM Emissions

Emissions Factor: 0.00014 lb/ton (assume controlled due to BACT / NSPS / 20% opacity) Calculations: 0.252 lb/hr 0.00014lb/ton*450ton/hr*4conveyor transfers=

0.252lb/hr*8760hr/yr*0.0005 ton/lb = 1.10 ton/yr

PM10 Emissions

Emissions Factor: 0.000046 lb/ton (assume controlled due to BACT / NSPS / 20% opacity) Calculations: 0.000046lb/ton*450ton/hr*4conveyor transfers= 0.0828 lb/hr

0.0828lb/hr*8760hr/yr*0.0005 ton/lb =0.36 ton/yr

PM2.5 Emissions

Emissions Factor: (assume controlled due to BACT / NSPS / 20% opacity) 0.00001 lb/ton Calculations: 0.00001lb/ton*450ton/hr*4conveyor transfers= 0.018 lb/hr 0.018lb/hr*8760hr/yr*0.0005 ton/lb =0.08 ton/yr

From a mass balance standpoint, one pile at maximum capacity can be assumed Material handling from loading and unloading helps cover piles reformed outside the process

E = k(0.0032)
$$\frac{\left(\frac{U}{5}\right)^{1.3}}{\left(\frac{M}{2}\right)^{1.4}}$$
 (pound [lb]/ton)

where:

E = emission factor

k = particle size multiplier (dimensionless)

U = mean wind speed, meters per second (m/s) (miles per hour [mph])

M = material moisture content (%)

K = 1 for PM

0.35 for PM10 0.053 for PM2.5

U = 9.3 www.ncdc.noaa.gov/oa/climate/online/ccd/avgwind.html

(See Guidance - wind data for Statewide Average)

M = 1.5 % - see guidance - based on moisture contents assumed

for crushing and screening operations.

PM Emissions

Emissions Factor: 0.010726 lb/ton

Calculations: 0.0107lb/ton*450ton/hr= 4.83 lb/hr

4.8266lb/hr*8760hr/yr*0.0005 ton/lb = **21.14 ton/yr**

PM10 Emissions

Emissions Factor: 0.003754 lb/ton

Calculations: 0.0038lb/ton*450ton/hr= 1.69 lb/hr

1.6893lb/hr*8760hr/yr*0.0005 ton/lb = **7.40 ton/yr**

PM2.5 Emissions

Emissions Factor: 0.000568 lb/ton

Calculations: 0.0006lb/ton*450ton/hr= 0.26 lb/hr

0.2558lb/hr*8760hr/yr*0.0005 ton/lb = 1.12 ton/yr

<u>Loading</u> <u>http://www.epa.gov/ttn/chief/ap42/ch11/final/c11s1902.pdf</u>

These operations typically involve truck loading operations. Limited emissions factor data is available Assume steady stockpiling for PTE purposes (i.e - what's made is sold and pile sizes stay relatively the same)

Maximum Capacity: 450 ton/hr Hours per year: 8760 hr/yr

PM10 Emissions

Emissions Factor: 0.0001 lb/ton

Calculations: 0.0001lb/ton*450ton/hr= 0.045 lb/hr

0.045lb/hr*8760hr/yr*0.0005 ton/lb = **0.20** ton/yr

With no other data, utilize the same PM/PM10/PM2.5 ratios as the conveyor emissions factors

**This is loading of finished product from product pile to truck

<u>Unloading</u> <u>http://www.epa.gov/ttn/chief/ap42/ch11/final/c11s1902.pdf</u>

These operations typically involve on-site truck unloading.

Limited emissions factor data is available

PM10 Emissions

Emissions Factor: 0.000016 lb/ton

Calculations: 0.000016lb/ton*450ton/hr= 0.0072 lb/ton

0.0072lb/ton*8760hr/yr*0.0005ton/lb = 0.03 ton/yr

With no other data, and no other similar emissions, no futher calculations can be made

**This is unloading of fragmented stone for processing, for example

Haul Roads, Unpaved Area Traffic

http://www.epa.gov/ttn/chief/ap42/ch13/final/c13s0202.pdf

These calculations account for emissions from travel on unpaved surfaces. Because emissions can vary greatly, and this source category is permitted in a flexible manner, the Department normally uses default values for this calculation.

For permit determination purposes, these emissions are omitted from consideration

The Department usually assumes truck weights of 50 tons, and an average of 5 miles traveled per day

$E = k (s/12)^a (W/3)^b$

PM Emissions

k =	4.9
a =	0.7
b =	0.45

s = 5.95 <-- average of sand and gravel
W = 50 tons (Department history)
VMT = 5 miles traveled per day

E = 10.63562512 lb/mile

Calculations

 10.6356251207538lb/mile*5miles traveled per day=
 53.17813 lb/day

 53.178125603769lb/day*365 day/yr * 0.0005 ton/lb =
 9.71 ton/yr

 50% control efficieny:
 4.85 ton/yr

PM10 Emissions

k =	1.5
a =	0.9
b =	0.45

s = 5.95 <-- average of sand and gravel
W = 50 tons (Department history)
VMT = 5 miles traveled per day

E = 2.829601937 lb/mile

Calculations

 2.82960193695703lb/mile*5miles traveled per day=
 14.14801 lb/day

 14.148096847851lb/day*365 day/yr * 0.0005 ton/lb =
 2.58 ton/yr

 50% control efficiency:
 1.29 ton/yr

PM2.5 Emissions

 $\begin{array}{lll} k = & & 0.15 \\ a = & & 0.9 \\ b = & & 0.45 \end{array}$

s = 5.95 <-- average of sand and gravel
W = 50 tons (Department history)
VMT = 5 miles traveled per day

E = 0.282960194 lb/mile

Calculations

0.282960193695703lb/mile*5miles traveled per day= 1.414801 lb/day 1.41480096847851lb/day*365 day/yr * 0.0005 ton/lb = 0.26 ton/yr 50% Control Efficiency: 0.13 ton/yr

Diesel Generator Engine					
Engine Rating:	106.6	k\\/			
Engine Rating.	143				
Hours of Operation:		hr/yr			
nours or operation.	3,00	, γ.			
NOX Emissions					
Emissions Factor	14.6	g/kW*hr	AP-42 Table 3.4-1 con	verted to g/kW*hr	
Calculations	14.6g/kW*hr*106.6kW*8760hr/yr= 13633713.6				
	13633713.6g/	yr* 1/454 g	30030.21	lb/yr	
	30030.206167	4009lb/yr/	15.02	ton/yr	
VOC Emissions					
Emissions Factor	0.429	g/kW*hr	AP-42 Table 3.4-1 con	verted to g/kW*hr	
Calculations	0.429g/kW*h	r*106.6kW	*8760hr/yr *0.91 =	364552.43	g/yr
	364552.42824	g/yr* 1/45	4 gm/lb * 0.91 =	730.71	lb/yr
	730.71081431	3656lb/yr/	0.37	ton/yr	
PM (fil) Emissions					
Emissions Factor	0.37914	g/kW*hr	AP-42 Table 3.4-1 con	verted to g/kW*hr	
Calculations	0.37914g/kW*hr*106.6kW*8760hr/yr= 354047.00				
	354046.99824	779.84	lb/yr		
	779.839203171806lb/yr/2000 lb/ton =			0.39	ton/yr
PM Condensable Emissions					
Emissions Factor	0.04686	g/kW*hr	AP-42 Table 3.4-1 con	verted to g/kW*hr	
Calculations		0.04686g/kW*hr*106.6kW*8760hr/yr= 43758.			g/vr
	43758.61776g	96.38	- ·		
	96.384620616	-		ton/yr	
SO2 Emissions					
Emissions Factor	0.000012135	lb/hr-hr	AP-42 Table 3.4-1 assi	uming 0.0015% sulfur by	weight
Calculations	0.000012135lb/hr-hr*143hp= 0.00173				
	0.00173530511			ton/yr	
CO Emissions					
CO LITTISSIONS					
Emissions Factor	0.0055	lb/hp-hr	AP-42 Table 3.4-1		
Calculations	0.0055lb/hp-l	nr*143hp=		0.7865	lb/hr
	0.7865lb/hr*8	3760hr/vr*	0.0005 ton/lb =	3.44	ton/yr

V. Existing Air Quality

MAQP #2961-01 authorizes operations at any location in Montana, except those areas having a Department of Environmental Quality (Department)-approved permitting program, areas considered tribal lands, or areas in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) nonattainment areas.

VI. Air Quality Impacts

Based on the amount of allowable emissions associated with MAQP #2961-01, the Department does not expect any more than minor impacts to air quality. The Department believes this operation will not cause or contribute to a violation of any ambient air quality standard.

VII. Taking or Damaging Implication Analysis

As required by 2-10-105, MCA, the Department conducted the following private property taking and damaging assessment.

YES	NO	
XX		1. Does the action pertain to land or water management or environmental regulation
		affecting private real property or water rights?
	XX	2. Does the action result in either a permanent or indefinite physical occupation of
		private property?
	XX	3. Does the action deny a fundamental attribute of ownership? (ex.: right to exclude
		others, disposal of property)
	XX	4. Does the action deprive the owner of all economically viable uses of the property?
	XX	5. Does the action require a property owner to dedicate a portion of property or to
		grant an easement? [If no, go to (6)].
		5a. Is there a reasonable, specific connection between the government requirement
		and legitimate state interests?
		5b. Is the government requirement roughly proportional to the impact of the
		proposed use of the property?
	XX	6. Does the action have a severe impact on the value of the property? (consider
		economic impact, investment-backed expectations, character of government action)
	XX	7. Does the action damage the property by causing some physical disturbance with
		respect to the property in excess of that sustained by the public generally?
	XX	7a. Is the impact of government action direct, peculiar, and significant?
	XX	7b. Has government action resulted in the property becoming practically inaccessible,
		waterlogged or flooded?
	XX	7c. Has government action lowered property values by more than 30% and
		necessitated the physical taking of adjacent property or property across a public way
		from the property in question?
	XX	Takings or damaging implications? (Taking or damaging implications exist if YES is
		checked in response to question 1 and also to any one or more of the following
		questions: 2, 3, 4, 6, 7a, 7b, 7c; or if NO is checked in response to questions 5a or 5b;
		the shaded areas)

Based on this analysis, the Department determined there are no taking or damaging implications associated with this permit action.

VIII. Environmental Assessment

An environmental assessment, required by the Montana Environmental Policy Act, was completed for this project. A copy is attached.

DEPARTMENT OF ENVIRONMENTAL QUALITY

Air, Energy & Mining Division Air Quality Bureau P.O. Box 200901, Helena, MT 59620 (406) 444-3490

ENVIRONMENTAL ASSESSMENT (EA)

Issued To: Dickman Excavating S & G

130 Gibson Flats Road Great Falls, MT 59405

Montana Air Quality Permit number (MAQP): 2961-01

EA Draft: 4/9/2018

EA Final: Permit Final:

- 1. Legal Description of Site: Initially located in the NW½ of the SW½ of Section 34, Township 20 North, Range 4 East, Cascade County, Montana. However, MAQP #2961-01 would apply while operating at any location in Montana, except those areas having a Department of Environmental Quality (Department)-approved permitting program, areas considered tribal lands, or areas in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM₁0) nonattainment areas.
- 2. Description of Project: On February 8, 2018, the Department received an application from Dickman Excavating S & G (Dickman Excavating) to update the equipment list associated with this permit. Additional information was received as necessary to complete the application on March 28, 2018. The permit action updates to the permit to allow for the desired equipment. The permit is written in a flexible manner such that future changes to equipment is allowable provided permit limitations are adhered to.
- 3. *Objectives of Project:* To allow Dickman Excavating to continue providing crushing and screening services and associated products.
- 4. Alternatives Considered: In addition to the proposed action, the Department also considered the "no-action" alternative. Dickman Excavating has proposed an application in compliance with all applicable clean air act requirements, and the Department has proposed limitations in compliance with all applicable clean air act requirements. Therefore, the "no-action" alternative was eliminated from further consideration. Other alternatives considered were discussed in the BACT analysis of the permit.
- 5. A Listing of Mitigation, Stipulations, and Other Controls: A list of enforceable conditions, including a BACT analysis, would be included in MAQP #2961-01.

- 6. Regulatory Effects on Private Property: The Department considered alternatives to the conditions imposed in this permit as part of the permit development. The Department determined that the permit conditions are reasonably necessary to ensure compliance with applicable requirements and demonstrate compliance with those requirements and do not unduly restrict private property rights.
- 7. SUMMARY OF COMMENTS ON POTENTIAL PHYSICAL AND BIOLOGICAL EFFECTS: The following comments have been prepared by the Department.
 - A. Terrestrial and Aquatic Life and Habitats

Dickman Excavating is proposing equipment changes associated with a facility in operation for over 30 years. No significant change in allowable emissions is proposed by MAQP #2961-01. Any impacts to terrestrial and aquatic life and habitats as a result of issuance of MAQP #2961-01 would be expected to be minor, if any.

B. Water Quality, Quantity and Distribution

Dickman Excavating is proposing equipment changes associated with a facility in operation for over 30 years. No significant change in allowable emissions is proposed by MAQP #2961-01. No significant change in water usage would be expected. Water usage would be required to comply with emissions control requirements. Any impacts as a result of issuance of MAQP #2961-01 would be expected to be minor, if any.

C. Geology and Soil Quality, Stability and Moisture

Dickman Excavating is proposing equipment changes associated with a facility in operation for over 30 years. No significant change in allowable emissions is proposed by MAQP #2961-01. Continued water usage would be expected. Any impacts as a result of issuance of MAQP #2961-01 would be expected to be minor.

D. Vegetation Cover, Quantity, and Quality

Dickman Excavating is proposing equipment changes associated with a facility in operation for over 30 years. No significant change in allowable emissions is proposed by MAQP #2961-01, and therefore, no significant increase in emissions deposition. Impacts as a result of issuance of MAQP #2961-01 would be expected to be minor.

E. Aesthetics

Dickman Excavating is proposing equipment changes associated with a facility in operation for over 30 years. No significant change in allowable emissions is proposed by MAQP #2961-01. Any impacts as a result of issuance of MAQP #2961-01 would be expected to be minor.

F. Air Quality

Dickman Excavating is proposing equipment changes associated with a facility in operation for over 30 years. No significant change in allowable emissions is proposed by MAQP #2961-01. Any impacts as a result of issuance of MAQP #2961-01 would be expected to be minor.

G. Unique Endangered, Fragile, or Limited Environmental Resources

Dickman Excavating is proposing equipment changes associated with a facility in operation for over 30 years. No significant change in allowable emissions is proposed by MAQP #2961-01. Impacts as a result of issuance of MAQP #2961-01 would be expected to be minor, if any.

H. Sage Grouse Executive Order

The Department recognizes that the site location is not within a Greater Sage Grouse Habitat Area as defined by Executive Order No. 12-2015.

I. Demands on Environmental Resource of Water, Air and Energy

Dickman Excavating is proposing equipment changes associated with a facility in operation for over 30 years. No significant change in allowable emissions is proposed by MAQP #2961-01. Water and diesel usage would continue, however, changes in these needs would be expected to be minor. Any impacts as a result of issuance of MAQP #2961-01 would be expected to be minor.

J. Historical and Archaeological Sites

Dickman Excavating is proposing equipment changes associated with a facility in operation for over 30 years. No significant change in allowable emissions is proposed by MAQP #2961-01. Any impacts as a result of issuance of MAQP #2961-01 would be expected to be minor, if any. Given the long history of operations, the discovery of any new historically or archaeological resources/sites would not be expected.

K. Cumulative and Secondary Impacts

Dickman Excavating is proposing equipment changes associated with a facility in operation for over 30 years. No significant change in allowable emissions is proposed by MAQP #2961-01. Any impacts as a result of issuance of MAQP #2961-01 would be expected to be minor, if any.

8. SUMMARY OF COMMENTS ON POTENTIAL ECONOMIC AND SOCIAL EFFECTS: The following comments have been prepared by the Department.

A. Social Structures and Mores

Dickman Excavating is proposing equipment changes associated with a facility in operation for over 30 years. No significant change in allowable emissions is

proposed by MAQP #2961-01. Any impacts as a result of issuance of MAQP #2961-01 would be expected to be minor, if any.

B. Cultural Uniqueness and Diversity

Dickman Excavating is proposing equipment changes associated with a facility in operation for over 30 years. No significant change in allowable emissions is proposed by MAQP #2961-01. Any impacts as a result of issuance of MAQP #2961-01 would be expected to be minor, if any.

C. Local and State Tax Base and Tax Revenue

Dickman Excavating is proposing equipment changes associated with a facility in operation for over 30 years. No significant change in allowable emissions is proposed by MAQP #2961-01. Impacts as a result of issuance of MAQP #2961-01 would be expected to be minor, if any.

D. Agricultural or Industrial Production

Dickman Excavating is proposing equipment changes associated with a facility in operation for over 30 years. No significant change in allowable emissions is proposed by MAQP #2961-01. Any impacts as a result of issuance of MAQP #2961-01 would be expected to be minor.

E. Human Health

Dickman Excavating is proposing equipment changes associated with a facility in operation for over 30 years. No significant change in allowable emissions is proposed by MAQP #2961-01. Any impacts as a result of issuance of MAQP #2961-01 would be expected to be minor.

F. Access to and Quality of Recreational and Wilderness Activities

Dickman Excavating is proposing equipment changes associated with a facility in operation for over 30 years. No significant change in allowable emissions is proposed by MAQP #2961-01. Impacts as a result of issuance of MAQP #2961-01 would be expected to be minor, if any.

G. Quantity and Distribution of Employment

Dickman Excavating is proposing equipment changes associated with a facility in operation for over 30 years. No significant change in allowable emissions is proposed by MAQP #2961-01. No additional employment is necessary as a result of MAQP #2961-01, although the permit would allow for a growth in operational needs. Any impacts as a result of issuance of MAQP #2961-01 would be expected to be minor, if any.

H. Distribution of Population

Dickman Excavating is proposing equipment changes associated with a facility in operation for over 30 years. No additional employment is necessary as a result of MAQP #2961-01, although the permit would allow for a growth in operational needs. No significant change in allowable emissions is proposed by MAQP #2961-01. Any impacts as a result of issuance of MAQP #2961-01 would be expected to be minor, if any.

I. Demands for Government Services

Dickman Excavating is proposing equipment changes associated with a facility in operation for over 30 years. No significant change in allowable emissions is proposed by MAQP #2961-01. No change in government services would be expected as a result of issuance of MAQP #2961-01. Any impacts as a result of issuance of MAQP #2961-01 would be expected to be minor.

J. Industrial and Commercial Activity

Dickman Excavating is proposing equipment changes associated with a facility in operation for over 30 years. No significant change in allowable emissions is proposed by MAQP #2961-01. Any impacts as a result of issuance of MAQP #2961-01 would be expected to be minor, if any.

K. Locally Adopted Environmental Plans and Goals

The Department is not aware of any locally adopted environmental plans and goals which would be affected by issuance of MAQP #2961-01. Dickman Excavating is proposing equipment changes associated with a facility in operation for over 30 years. No significant change in allowable emissions is proposed by MAQP #2961-01. Any impacts as a result of issuance of MAQP #2961-01 would be expected to be minor, if any.

L. Cumulative and Secondary Impacts

The Department has found no more than minor impacts to the individual social and economic considerations above. Additionally, cumulative and secondary impacts would be expected to be minor.

Recommendation: No Environmental Impact Statement (EIS) is required.

If an EIS is not required, explain why the EA is an appropriate level of analysis: The current permitting action is for the construction and operation of crushing and screening equipment for a facility that has been in operation for decades. MAQP #2961-01 includes conditions and limitations to ensure the facility will operate in compliance with all applicable rules and regulations. In addition, there are no significant impacts associated with this proposal.

Other groups or agencies contacted or which may have overlapping jurisdiction: Montana Historical Society – State Historic Preservation Office, Natural Resource Information System – Montana Natural Heritage Program – Montana Sage Grouse Conservation Program

<u>Individuals or groups contributing to this EA</u>: Department of Environmental Quality – Air Quality Bureau, Montana Historical Society – State Historic Preservation Office, Natural Resource Information System – Montana Natural Heritage Program

EA prepared by: Shawn Juers

Date: 4/2/2018